

SYSTEM AND METHOD FOR MONITORING TORQUE IN AN ELECTRIC MOTOR

Abstract

A method for monitoring torque in an electric motor is provided.

First, the motor current is measured and the AC torque is determined based on the measured current. The speed of the motor and the DC motor power are then determined. The DC torque is calculated as a function of the DC motor power and the motor speed. The DC torque is then compared to the AC torque. After the AC torque is verified, it is compared to a reference torque to determine if the difference between the torques is within a torque deviation tolerance.